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Water Supply Outlook For Nevada



SOIL CONSERVATION SERVICE
U.S. DEPARTMENT OF AGRICULTURE

Cooperating with

NEVADA DEPARTMENT of CONSERVATION
AND NATURAL RESOURCES
DIVISION OF WATER RESOURCES

AS OF
FEB. 1, 1980

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

*COVER PHOTO: THE SNOW PROJECT CENTRAL COMPUTER FACILITIES IN PORTLAND, OREGON.
THE TERMINAL, PRINTER, COMPUTER AND TAPE DRIVES HAVE NOT COMPLETELY REPLACED THE
SNOW SAMPLING TUBES SEEN IN THE FOREGROUND.*

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, Federal Building, 230 N. First Ave., Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno, Nevada 89505
Oregon	1220 S. W. Third Ave., Portland, Oregon 97204
Utah	4420 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U. S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Snow Surveys Branch, California Department of Water Resources, P.O. Box 388, Sacramento, California 95802 --- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 --- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 --- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W., Calgary, Alberta T3C 1A6.



WATER SUPPLY OUTLOOK FOR NEVADA

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

NORMAN A. BERG

ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D C

Released by

GERALD THOLA

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
RENO, NEVADA

In Cooperation with

ROLAND D. WESTERGARD

DIRECTOR
DEPARTMENT OF CONSERVATION AND
NATURAL RESOURCES
CARSON CITY, NEVADA

Report prepared by

RONALD E. MORELAND, Snow Survey Supervisor
and

GARRY L. SCHAEFER, Assistant Snow Survey Supervisor
SOIL CONSERVATION SERVICE
P. O. BOX 4850
RENO, NEVADA

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All averages are for 1963-77 period.

WATER SUPPLY OUTLOOK FOR NEVADA

THE WATER SUPPLY OUTLOOK FOR THIS SEASON IMPROVED DURING JANUARY. STREAMFLOW FORECASTS ARE NOW NEAR AVERAGE ON ALL NEVADA STREAMS EXCEPT IN THE NORTHEAST PORTION OF THE STATE.

MOST SNOW COURSE MEASUREMENTS TAKEN THE LATTER PART OF JANUARY INDICATE AVERAGE TO ABOVE AVERAGE SNOW WATER CONTENTS. HOWEVER, THE LOWER ELEVATION SNOWPACK IS BELOW AVERAGE. AS OF FEBRUARY 1, 1980, THE SNOW WATER CONTENTS ON THE TAHOE, TRUCKEE, CARSON AND WALKER BASINS ARE 78 PERCENT OF THE APRIL 1 AVERAGE. THE AVERAGE FOR FEBRUARY 1 IS 70 PERCENT OF APRIL 1.

RESERVOIR STORAGE HAS SIGNIFICANTLY IMPROVED AS A RESULT OF THE EXTENSIVE RAINS RECEIVED OVER MOST AREAS IN THE STATE. LAKE TAHOE NOW CONTAINS 219,000 ACRE-FEET OF USEABLE STORAGE, THE HIGHEST FEBRUARY 1 AMOUNT SINCE 1976. THIS STILL IS ONLY 46 PERCENT OF AVERAGE BUT CONSIDERABLY ABOVE LAST YEAR'S 87,000 ACRE-FEET. STORAGE IN OTHER RESERVOIRS IS NEAR AVERAGE.

Sierra East Slope

Snow course measurements taken the end of January indicate snow water content is 101 percent of average in the Truckee Basin, 108 percent in the Tahoe Basin, 118 percent in the Carson Basin, and 131 percent in the Walker Basin. This is improved over last month. The present snowpack is significantly above the February 1, 1979, snow water content. This year's snowpack, compared to last year, is 181 percent in the Truckee, 163 percent in Tahoe, 145 percent in the Carson, and 146 percent in the Walker Basins.

There was considerable storm activity during the month. Snow water content increase during the month was 144 percent of the average January increase. The warm storm period, January 9-15, melted the lower elevation snow and some of the snow on the intermediate areas.

The Fallen Leaf site (elevation 6,240 feet) lost all of its 4.0 inches of snow water while, during the same period, receiving 13.7 inches of total precipitation. The Ward Creek #3 site (elevation 6,750 feet) during the January 9-15 storm had a net gain of 3.8 inches snow water while receiving 19.4 inches of precipitation. Independence Lake (elevation 8,450 feet) received 11.8 inches snow water and 12.2 inches total precipitation. These three sites exemplify the impact in temperatures and the resulting precipitation, rain or snow.

The rains created flood problems on most streams on the Eastern Sierra. Some of the runoff was captured in reservoirs so the storage this month greatly increased. Lake Tahoe gained 134,000 acre-feet of water from direct precipitation and runoff. This is equivalent to a rise of 1.10 feet in elevation. The average increase during January is 34,000 acre-feet.

Storage in other reservoirs also improved. Lahontan now contains 236,000 acre-feet, 110 percent of average and a gain of 62,000 acre-feet during the month. Topaz and Bridgeport had significant gains and have near average storage.

Humboldt

Snow measurements in the Humboldt Basin indicate the snow water is 113 percent of average. This year is very similar to last February 1. Rains during the month greatly reduced the extent of snow cover but the higher elevation snowpack continued to increase.

Streamflow forecasts are near average on most streams in the area. The Humboldt River at Palisade and Comus is forecast at 86 to 79 percent, respectively.

Storage in Rye Patch Reservoir increased significantly during the month as the result of storm runoff. The content is now 103,000 acre-feet as compared to last year's 49,000 acre-feet. This month's increase was 13,000 acre-feet, or 260 percent of the month's average.

Owyhee and Snake

Snow water content in these basins is near average at 101 percent. Streamflow forecasts are below average in these areas.

Storage in Wildhorse Reservoir is now 36,000 for 120 percent of average. Inflow during the month was above average but not as significant as in other reservoirs.

Northern Great Basin

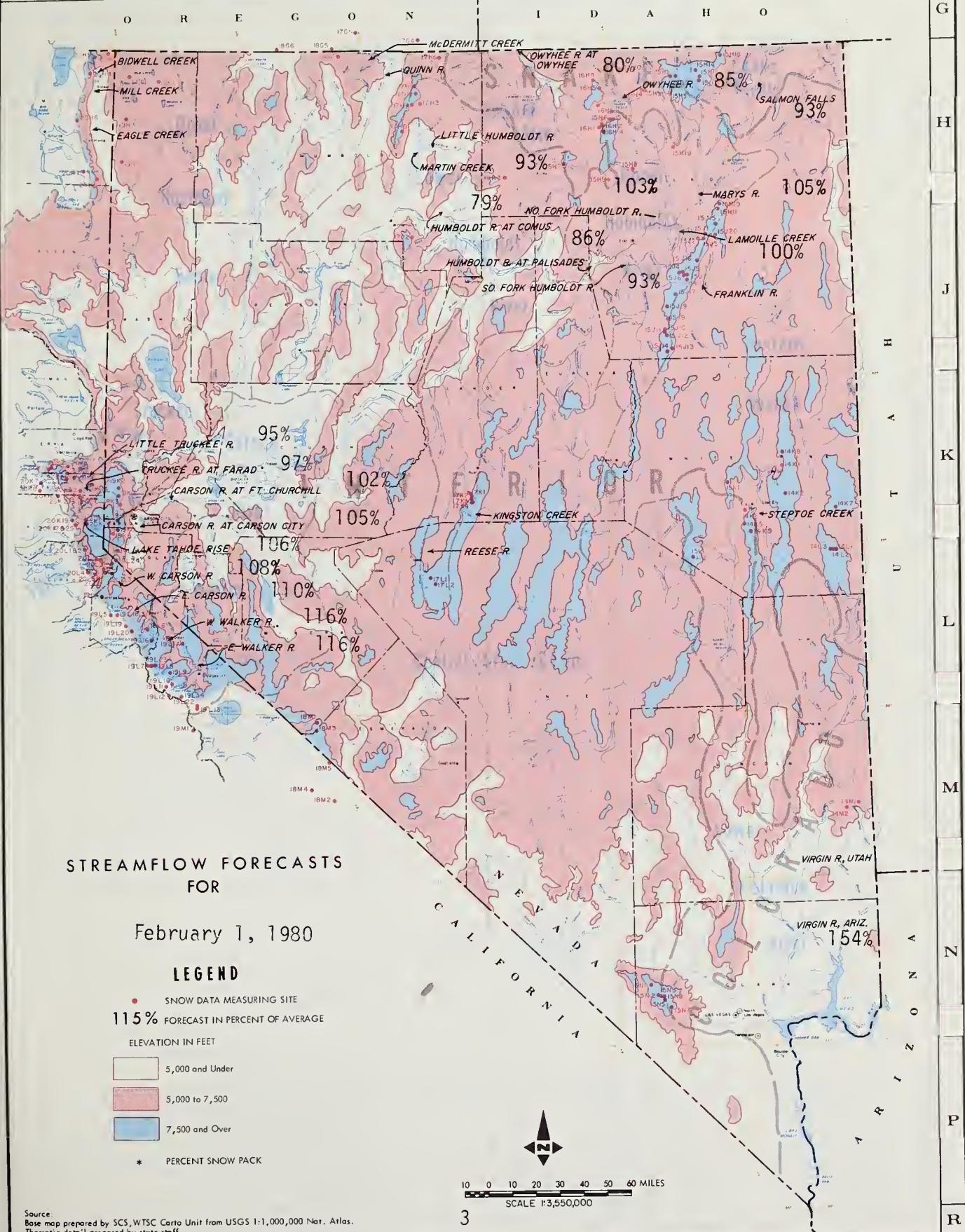
Snow course measurements in this area indicate snow water content is 114 percent of average. This is considerably above last year's February 1 water content. Cedar Pass has 13.6 inches of water as compared to last year's 7.5 inches.

Eastern Nevada

Snow course measurements in this area are near average on the higher elevations and slightly below on lower elevations. Most are similar to last year's measurements.

PROSPECTIVE WATER SUPPLY FOR NEVADA

20 19 18 17 16 15 14 13



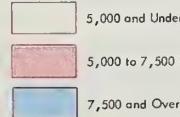
STREAMFLOW FORECASTS FOR

February 1, 1980

LEGEND

- SNOW DATA MEASURING SITE
115% FORECAST IN PERCENT OF AVERAGE

ELEVATION IN FEET



* PERCENT SNOW PACK

SCALE 1:3,550,000

INDEX TO NEVADA SNOW COURSES (By Basins)

Refer to the map on the preceding page for Snow Course locations.

NUMBER	NAME	SEC.	TWP.	RGE.	ELEV.
--------	------	------	------	------	-------

SNAKE RIVER BASIN

SNAKE RIVER

		31	46N	58E	7800
15H15MA	Bear Creek	33	46N	58E	6800
15H2	Fox Creek	31	46N	60E	8800
15H35A	Goat Creek	6	45N	60E	8945
15H15A	Hummingbird Springs	10	46N	54E	7000
15H20A	Merritt Mountain	13	46N	59E	8330
15H145A	Pole Creek Ranger Station	15	47N	61E	7940
15H18a	Red Point	6	44N	58E	7100
15H35A	76 Creek	32	41N	58E	7800
15H19a	Stag Mountain				

OWYHEE RIVER

		30	45N	56E	6700
15H45M	Big Bend	31	44N	53E	6650
16H6a	Columbia Basin	2	45N	52E	7000
16H8a5	Fawn Creek	32	45N	56E	6600
15H5	Gold Creek	18	42N	53E	6800
16H1M	Jack Creek, Lower	9	42N	53E	7250
16H25AM	Jack Creek, Upper	21	42N	53E	8420
16H45	Jacks Peak	20	45N	53E	6700
17G4a	Louise Canyon (OR)	35	39N	53E	6200
15H9MP5	Taylor Canyon				

INTERIOR

UPPER HUMBOLDT RIVER

		32	31N	58E	7800
15J17a	American Beauty	27	28N	57E	8500
15J25A	Corral Canyon	28	35N	60E	8100
15J15M	Dorsey Basin	5	34N	60E	6500
15J3	Dry Creek	31	43N	54E	6700
15H7	Fry Canyon	23	29N	57E	8000
15J95M	Green Mountain	9	28N	57E	6600
15J10	Harrison Pass #1	16	28N	57E	7400
15J11	Harrison Pass #2	15	32N	58E	7100
15J4	Lamoille #1	24	32N	58E	7700
15J6S	Lamoille #3	31	32N	59E	8700
15J8P	Lamoille #5	6	34N	61E	7700
15J20	Pole Canyon #2	23	33N	59E	9200
15J16a	Robinson Lake	36	43N	53E	6800
15J2	Rodeo Flat	1	34N	59E	5800
15J19	Ryan Ranch	26	30N	57E	7600
15H8	Smith Creek	9	39N	55E	5700
15H10P	Tremewan Ranch	28	37N	61E	6900
15H11A	Trout Creek, Lower	4	36N	61E	8500

LOWER HUMBOLDT RIVER

		10	17N	43E	6600
17K1	Big Creek Campground	35	17N	43E	8700
17K4S	Big Creek Summit	23	17N	43E	7600
17K2	Big Creek Mine	26	17N	43E	7800
17K3	Big Creek, Upper	25	45N	39E	6700
17H2S	Buckskin, Lower	11	45N	39E	8200
17H1	Buckskin, Upper	12	11N	40E	7500
17L1	Corral, Lower	20	11N	41E	8000
17J2	Corral, Upper	22	35N	39E	6000
17H4S	Golconda #2	22	44N	39E	7800
17H5S	Granite Peak	13	42N	38E	6000
17H3	Lamance Creek	13	44N	39E	6700
16H3AP	Martin Creek	18	39N	46E	7200
16H7a	Midas	29	40N	50E	7700

EASTERN NEVADA

		29	13N	69E	7950
14L1	Baker #1	30	13N	69E	8950
14L2	Baker #2	25	34E	10500	
14L3	Baker #3	25	13N	68E	9250
14K2S	Berry Creek	34	20N	65E	9100
14K1	Bird Creek	9	14N	63E	9200
14K9a	Defiance Mines	6	35N	61E	7900
15J15S	Hole-in-Mountain	34	20N	65E	7400
14K8	Kalamazoo Creek	25	16N	62E	7250
14K3	Murray Summit	34	18N	61E	7600
15K1	Robinson Summit	35	40N	15E	7200
14K7	Silver Creek #2	25	15N	62E	8900

CENTRAL GREAT BASIN

		19	55	35E	10200
18M2	Campito Mountain (CA)	32	25	34E	10500
18M5a	Chiavich Flat (CA)	8	19S	56E	9000
15N2	Clark Canyon	4	1N	33E	7100
18M1	Montgomery Pass	28	1N	33E	9300
18M3a	Pinchot Creek (CA)	33	4S	33E	11700
18M4a	Piute Pass (CA)	23	18S	55E	8500

NORTHERN GREAT BASIN

		17	45N	21E	6270
20H5	Barber Creek (CA)	23	39N	16E	6500
20H6S	Cedar Pass (CA)	12	43N	14E	7100
18G6a	Oeno Creek (OR)	14	41S	34E	6000
18H1S	Disaster Peak	8	47N	34E	6500
20H3aS	Oismal Swamp (CA)	31	48N	17E	7000
20H7	Eagle Peak (CA)	35	40N	15E	7200
19H3	49 Mountain	7	42N	19E	6000
19H2	Hays Canyon	1	39N	18E	6400
19H4a	Little Bally Mountain	8	45N	19E	6000
20H9	Mt. Bidwell (CA)	6	47N	16E	7200
20H10	North Star (CA)	13	47N	16E	6200
17G5a	Oregon Canyon (OR)	9	40S	40E	7240
17H6a	Quinn Ridge	9	47N	41E	6300
20H4	Reservation Creek (CA)	12	46N	15E	5900
18G5a	Trout Creek (OR)	10	41S	38E	7800

LAKE TAHOE

		20L6S	Echo Peak (CA)	35	12N	17E	7800
20L10S	Echo Summit (CA)	6	11N	18E	7450		
19L2	Fallen Leaf (CA)	36	13N	18E	6300		
19K6	Glenbrook #2	13	14N	19E	6900		
19L3M5	Haagans Meadow (CA)	36	12N	18E	8000		
19L24S	Heavenly Valley (CA)	1	12N	18E	8850		
20L4	Lake Lucile (CA)	28	12N	17E	8200		
19K4M5	Marlette Lake	18	15N	19E	8000		
20L3	Meeks #2 (CA)	6	12N	18E	6500		
20L1	Rubicon #1 (CA)	6	13N	17E	8100		
20L2S	Rubicon #2 (CA)	6	13N	17E	7500		
20K16	Tahoe City (CA)	6	15N	17E	6250		
20K26	Tahoe City Alt. (CA)	7	15N	17E	6300		
20K27S	Tahoe City Cross (CA)	1	15N	16E	6750		
19L1	Upper Truckee (CA)	21	12N	18E	6400		
20K25S	Ward Creek (CA) #3	21	15N	16E	6750		
20K17	Ward Creek #2 (CA)	21	15N	16E	7000		

TRUCKEE RIVER

		20K14	Boca #2 (CA)	28	18N	17E	5900
20K22	Brookway Summit (CA)	3	17N	16E	7100		
20K21	Donner Park #2 (CA)	18	17N	16E	6000		
20K10	Donner Summit (CA)	25	17N	14E	6900		
20K7*	Fordyce Lake (CA)	34	18N	13E	6500		
20K8*	Furnace Flat (CA)	10	17N	13E	6700		
20K4M5	Independence Camp (CA)	34	19N	15E	7000		
20K35	Independence Creek (CA)	14	19N	15E	6500		
20K55	Independence Lake (CA)	9	18N	15E	8450		
19K3	Little Valley	17	16N	19E	6300		
19K2S	Mt. Rose	7	17N	19E	9000		
19K7S	Mt. Rose 5ki Area	30	17N	19E	9000		
20K6	Sage Hen Creek (CA)	7	18N	16E	6500		
20K19	Squaw Valley #2 (CA)	6	15N	16E	7500		
20K135	Truckee #2 (CA)	22	17N	16E	6400		
20K2*	Webber Lake (CA)	29	19N	14E	7000		
20K1*	Webber Peak (CA)	30	19N	14E	8000		

CARSON RIVER

		19L11	Buckeye Forks (CA)	20	4N	23E	8500
19L10	Buckeye Roughs (CA)	15	4N	23E	7900		
19L12	Center Mountain (CA)	4	3N	23E	9400		
19L8S	Leavitt Meadows (CA)	4	5N	22E	7200		
19L75A	Lobdell Lake (CA)	20	7N	24E	9200		
19L34	Sawmill Ridge (CA)	17	3N	24E	8750		
19L7	Sonora Pass (CA)	1	5N	21E	8800		
19L23S	Sonora Pass Bridge (CA)	6	5N	22E	8800		
19M1*	Tioga Pass (CA)	30	1N	25E	9900		
19L13	Virginia Lakes (CA)	5	2N	25E	9500		
19L22MS	Virginia Lakes Ridge (CA)	32	2N	25E	9200		
19L9	Willow Flat (CA)	21	5N	23E	8250		

COLORADO

LOWER COLORADO RIVER

		15N5	Kyle Canyon	27	19S	56E	8200
15N3	Lee Canyon #2	9	19S	56E	9200		
15N8	Lee Canyon #3	10	19S	56E	8500		
14M1	Mathew Canyon	10	6S	70E	6000		
14M2	Pine Canyon	23	6S	69E	6200		
15N7	Rainbow Canyon #2	6	20S	57E	8100		
15L1	White River #1	31	13N	59E	7400		

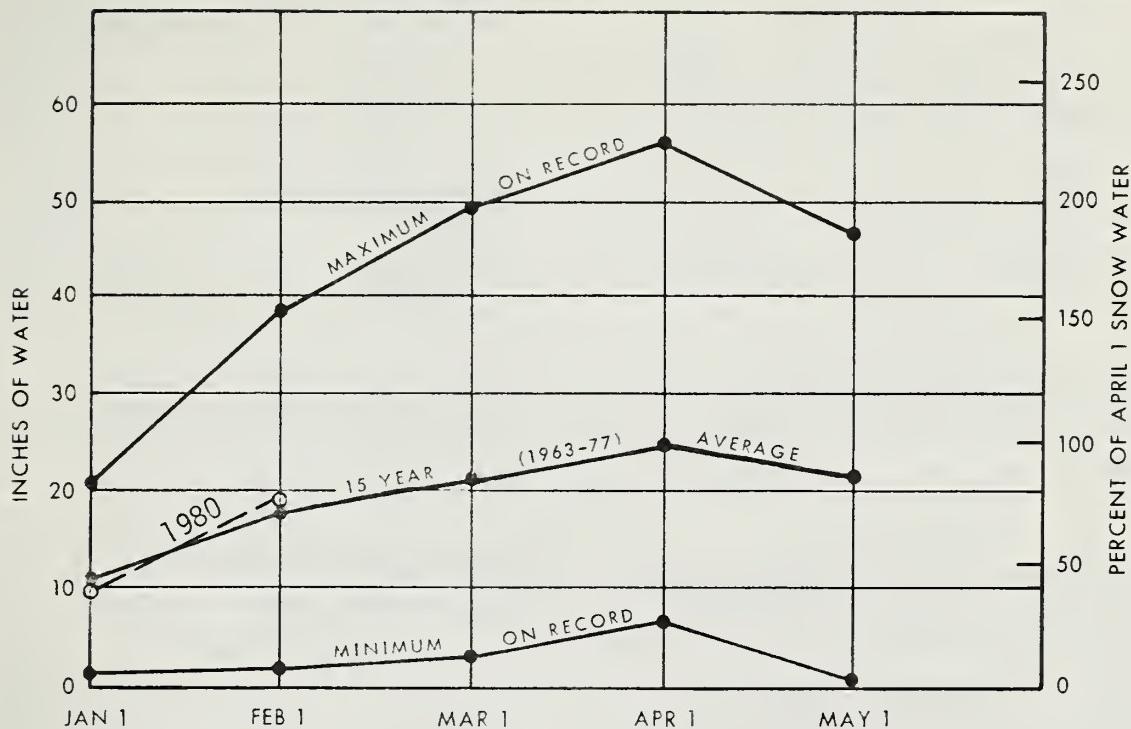
LEGEND

NUMBERING SYSTEM (EXAMPLE)

19K4	Snow Course Only
19K4S	Snow Course with SNOTEL
19K4M	Snow Course and Soil Moisture
19K4A	Snow Course and Aerial Marker
19K4P	Snow Course and Storage Precipitation Gage
19K4MA	Snow Course, Soil Moisture and Aerial Marker
19K4MP	Snow Course, Soil Moisture, and Precipitation Gage

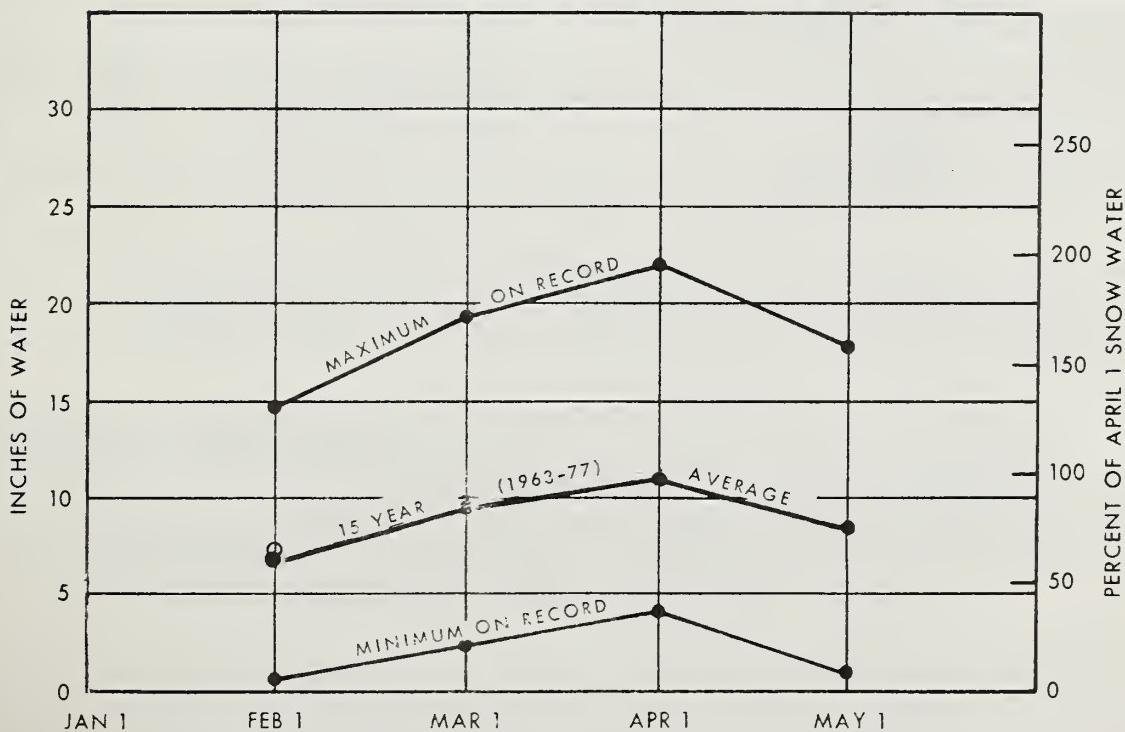
WINTER SNOWPACK
TAHOE, TRUCKEE, CARSON & WALKER BASINS
CALIFORNIA - NEVADA
1980

Data based on 9 long term Snow Courses



WINTER SNOWPACK
UPPER HUMBOLDT & SNAKE BASINS
NEVADA
1980

Data based on 13 selected Snow Courses



STREAMFLOW FORECASTS (Thousand Acre Feet) as of: February 1, 1980

Forecasts are based on snow-water presently stored in the mountain watersheds and the assumption that precipitation will be near average throughout the forecast period. Peak flow forecasts indicate the most probable range for the maximum average 24-hour flow. All averages are for 1963-77 period.

FORECAST POINT	Forecast Period	Forecast This Year	This Year as Percent of Average	Average +
TRUCKEE RIVER				
Truckee River at Farad, CA ^{1/}	April-July	265	97	273
Lake Tahoe Rise in Feet (assuming gates closed)	April 1 to high	1.50	106	1.42
Little Truckee River above Boca, CA	April-July	82	95	86
CARSON RIVER				
East Carson near Gardnerville, NV	April-July	205	110	187
West Carson at Woodfords, CA	April-July	57	108	53
Carson River near Carson City, NV	April-July	192	105	183
Carson River near Fort Churchill, NV	April-July	170	102	167
WALKER RIVER				
East Walker near Bridgeport, CA ^{2/}	April-Aug.	80	116	69
West Walker below Little Walker near Coleville, CA	April-July	170	116	146
HUMBOLDT RIVER				
Lamoille Creek near Lamoille, NV	April-July	29	100	29
S. Fork Humboldt above Dixie Creek, NV	April-July	68	93	73
Marys River above Hot Springs, NV	April-July	39	105	37
N. Fork Humboldt at Devils Gate, NV	April-July	36	103	35
Humboldt River at Palisade, NV	April-July	190	86	221
Humboldt River at Comus, NV	April-July	140	79	178
Martin Creek near Paradise, NV	April-July	14	93	15
SNAKE RIVER				
Owyhee River near Gold Creek, NV ^{3/}	April-July	20	85	23
Owyhee River near Owyhee, NV	April-July	64	80	80
Salmon Falls Creek near San Jacinto, NV	March-July	84	93	90
	March-Sept.	88	93	95
COLORADO RIVER				
Virgin River at Littlefield, AZ	April-June	73	154	48

NOTE: Streamflow forecasts which appear in this bulletin are a coordinated activity of the National Weather Service and the Soil Conservation Service in an effort to provide the best possible forecasting service to water users.

1. Observed flow plus change in storage in Boca, Stampede, Prosser Reservoir, Donner, Independence and Martis Creek Lakes and minus the flow at Truckee River at Tahoe City, CA.
2. Observed flow plus change in storage in Bridgeport Reservoir.
3. Observed flow plus change in storage in Wildhorse Reservoir.

RESERVOIR STORAGE (Thousand Acre Feet) AS OF February 1, 1980

Basin or Stream	RESERVOIR	Usable Capacity	Usable Storage		
			This Year	Last Year	Average +
Owyhee	Wild Horse	72	36	28	30
Lower Humboldt	Rye Patch	172	103	49	111
Colorado	Mohave	1,810	1,741	1,739	1,660
Colorado	Mead	26,159	22,789	22,787	17,580
Tahoe	Tahoe	732	219	87	479
Truckee	Boca	41	16	20	19
Truckee	Stampede**	220	83	62	118*
Truckee	Prosser***	30	10	9	7
Carson	Lahontan	291	236	230	214
West Walker	Topaz	59	34	43	37
East Walker	Bridgeport	42	32	38	31

+ Adjusted average.
** Storage began August 1, 1969.
*** Flood Control use allocation of 20,000 acre-feet between November 1 and April 10.

TOTAL RESERVOIR STORAGE (Thousand Acre Feet)

MONTH	This Year	Last Year	Average +
October 1	430	472	786
January 1	432	422	844
February 1	676	495	920
March 1		541	968
April 1		646	1,135
May 1		712	1,033

The above data developed from Wild Horse, Rye Patch, Tahoe, Boca, Lahontan, Topaz, and Bridgeport Reservoirs in 1,000 Acre-feet.
 TOTAL USABLE CAPACITY 1,409

PEAK FLOWS (MAXIMUM MEAN DAILY) (Av. flow for 24 hrs. on day of greatest flow)

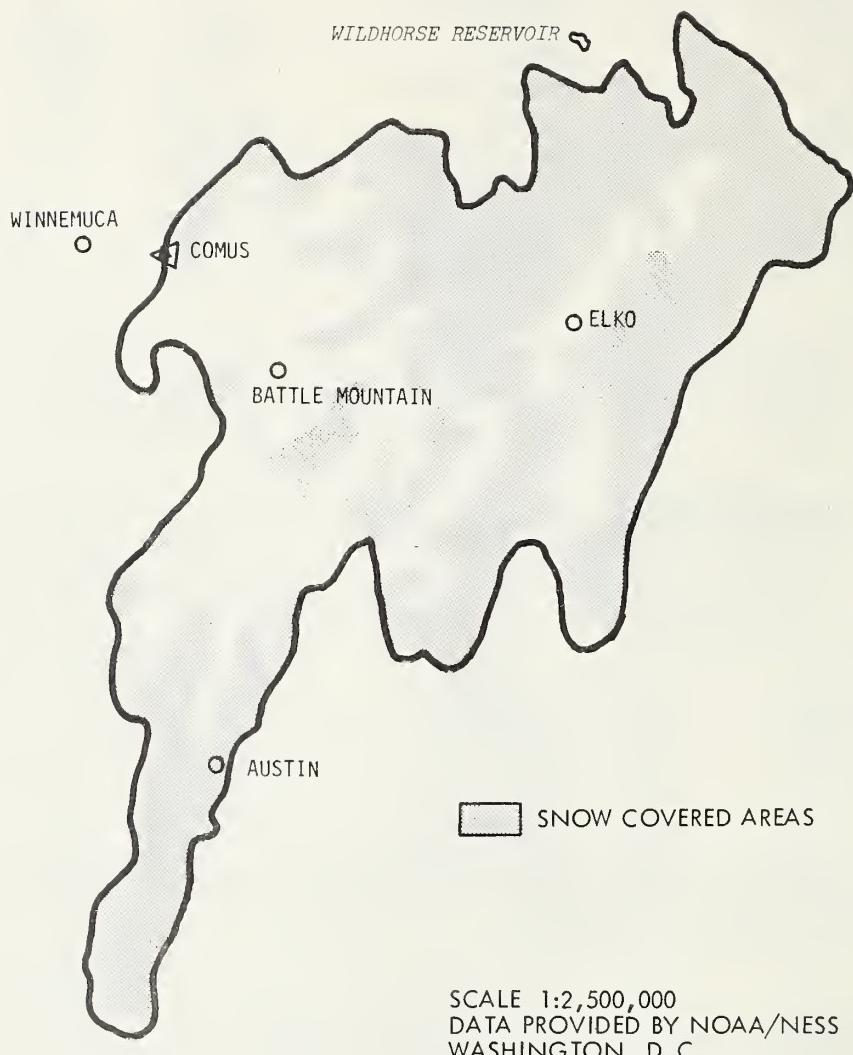
FORECAST POINT	PEAK FLOW (SECOND FEET)	
	Forecast Range	Average +
Peak flow forecasts not issued until March 1, 1980.		

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Low flow forecast not issued until March 1, 1980.			

+ 1963-1977 period.

SATELLITE SNOW COVER
HUMBOLDT RIVER ABOVE COMUS, NEVADA
January 25, 1980



<u>DATE</u>	<u>PERCENT SNOW COVER</u>	<u>DATE</u>	<u>PERCENT SNOW COVER</u>
Dec. 26, 1979	81.0%		
Jan. 2, 1980	46.0%		
Jan. 20, 1980	89.0%		
Jan. 24, 1980	70.0%		
Jan. 25, 1980	61.0%		

SATELLITE SNOW COVER
TAHOE-TRUCKEE, CARSON AND WALKER BASINS
 January 26, 1980



SCALE 1:2,000,000
 DATA PROVIDED BY NOAA/NESS
 WASHINGTON D.C.

<u>DATE</u>	<u>BASIN</u>	<u>PERCENT SNOW COVER</u>
Dec. 27, 1979	Tahoe-Truckee	68.0%
Dec. 27, 1979	Carson	31.0%
Dec. 27, 1979	Walker	67.0%
Jan. 20, 1980	Tahoe-Truckee	42.0%
Jan. 20, 1980	Carson	30.0%
Jan. 20, 1980	Walker	75.0%
Jan. 26, 1980	Tahoe-Truckee	30.0%
Jan. 26, 1980	Carson	15.0%
Jan. 26, 1980	Walker	25.0%

SNOW COURSE MEASUREMENTS

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
NAME	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average +
<u>LAKE TAHOE</u>						
Echo Peak (CA)	7,800	1/31/80	83	34.5	17.3	-
Echo Summit (CA)	7,450	1/31/80	66	23.1	14.3	23.7
Fallen Leaf (CA)	6,240	1/31/80	9	2.3	3.8	-
Freei Bench (CA)	7,300	1/31/80	20	7.9	7.0	9.1
Glenbrook #2	6,900	1/30/80	25	7.4	5.3	8.0
Hagan's Meadow (CA)	8,000	1/31/80	41	14.6	8.2	12.7
Heavenly Valley (CA)	8,800	1/31/80	63	23.4	13.9	19.1*
Lake Lucille (CA)	8,200	NS	-	-	-	-
Marlette Lake	8,000	1/31/80	52	17.0	9.0s	14.2
Richardsons #2 (CA)	6,500	1/30/80	26	8.2	8.3	11.2
Rubicon #1 (CA)	8,100	NS	-	-	-	-
Rubicon #2 (CA)	7,500	1/31/80	60	21.5	-	-
Tahoe City Cross (CA)	6,750	1/30/80	28	9.8	8.0	-
Upper Truckee (CA)	6,400	1/31/80	15	3.9	7.3	-
Ward Creek #2 (CA)	7,000	2/1/80	87	32.9	15.4	6.5
Ward Creek #3 (CA)	6,750	1/31/80	64	24.4	16.1	22.7*
<u>TRUCKEE RIVER</u>						
Boca #2 (CA)	5,900	1/27/80	8	2.3	3.4	5.1
Brockway Summit (CA)	7,100	1/30/80	42	14.9	6.7	13.5
Castle Creek (CA)	7,400	1/29/80	91	35.6	18.6	34.6
Donner Park #2 (CA)	6,000	1/27/80	21	7.0	5.7	12.0
Donner Summit (CA)	6,900	1/25/80	60	26.2	14.5	23.3*
Fordyce Lake (CA)	6,500	1/24/80	52	22.3	18.9	20.7
Furnace Flat (CA)	6,700	1/20/80	66	31.1	19.7	24.9
Independence Camp (CA)	7,000	1/31/80	40	13.5	7.0	16.8
Independence Creek (CA)	6,500	1/31/80	20	6.6	4.0	8.7
Independence Lake (CA)	8,450	1/31/80	95	37.4	13.1	-
Little Valley	6,300	1/29/80	10	1.3	4.3	-
Mount Rose	9,000	1/31/80	71	27.3	17.4s	-
Mount Rose Ski Area	8,850	1/31/80	97	37.2	18.2	26.7*
Sage Hen Creek (CA)	6,500	1/30/80	25	8.3	5.3	12.4
Squaw Valley #2 (CA)	7,500	1/31/80	93	39.4	20.1	32.9
Squaw Valley Gold Coast (CA)	8,200	NS	-	-	-	-
Truckee #2 (CA)	6,400	1/30/80	26	8.6	5.6	10.2
Webber Lake (CA)	7,000	NS	-	-	-	-
Webber Peak (CA)	8,000	NS	-	-	-	-
<u>CARSON RIVER</u>						
Blue Lakes (CA)	8,000	1/29/80	77	25.7	18.2	21.5
Carson Pass, Upper (CA)	8,600	1/24/80	72	26.4	17.8	22.8
Clear Creek	7,300	1/30/80	29	8.4	6.6	-
Ebbetts Pass AM (CA)	8,700	1/30/80	87	36.5a	20.0	21.3
Ebbetts Pass #2 (CA)	8,700	1/30/80	86	35.8	20.0	-
Fish Valley, Upper (CA)	8,050	1/30/80	31	10.2	8.7	10.3
Poison Flat (CA)	7,900	1/30/80	40	13.1	9.5	11.1
Wet Meadows Lake AM (CA)	8,050	1/30/80	69	24.2a	19.0	17.7
Wet Meadows #2 (CA)	8,050	1/30/80	87	29.4	23.0	-
Wolf Creek AM (CA)	8,000	1/30/80	62	23.6a	16.8	20.4
<u>WALKER RIVER</u>						
Buckeye Roughs (CA)	7,900	1/30/80	39	13.4	9.8	-
Center Mountain (CA)	9,400	1/30/80	92	33.2	20.9	25.8
Leavitt Lake (CA)	9,400	NS	-	-	24.3	-
Leavitt Meadow (CA)	7,200	1/30/80	14	3.9	6.8	-
Lobdell Lake (CA)	9,200	1/30/80	48	14.4	10.5	12.2*
Sawmill Ridge (CA)	8,750	1/30/80	44	14.2	10.2	-
Sonora Pass (CA)	8,800	1/30/80	53	18.7	12.3	16.4
Sonora Pass Bridge (CA)	8,800	1/30/80	60	19.3	13.8	-
Tioga Pass (CA)	9,900	1/30/80	69	28.7	18.5a	17.4
Virginia Lakes (CA)	9,500	1/30/80	46	15.3	10.8	10.4
Virginia Lakes Ridge (CA)	9,200	1/30/80	50	16.0	10.6	10.2
Willow Flat (CA)	8,250	1/30/80	21	7.8	6.5	-
<u>NORTHERN GREAT BASIN</u>						
Bald Mountain AM	6,720	1/28/80	15	5.0a	3.4a	0.9*
Barber Creek (CA)	6,500	1/29/80	29	9.5	5.7	8.3
Cedar Pass (CA)	7,100	1/28/80	41	13.6	7.5	10.6*
Denio Creek AM (OR)	6,000	NS	-	-	-	0.5*
Disaster Peak	6,500	NS	-	-	--	-
Dismal Swamp AM (CA)	7,000	1/28/80	64	21.1a	10.6a	10.6*
Eagle Peak (CA)	7,200	NS	-	-	-	-
49 Mountain	6,000	1/30/80	12	3.4	2.0	2.7
Hays Canyon	6,400	1/29/80	10	2.4	1.3	2.8
Little Bally Mountain AM	6,000	1/28/80	12	4.0	2.5a	2.2*
Mount Bidwell (CA)	7,240	NS	-	-	-	-
North Star (CA)	6,200	NS	-	-	-	-
Oregon Canyon AM (OR)	7,240	NS	-	-	-	4.0*
Quinn Ridge AM	6,300	NS	-	-	-	1.5*
Reservation Creek (CA)	5,900	1/31/80	24	8.0	5.6	8.0
Trout Creek AM (OR)	7,800	NS	-	-	-	4.6*

SNOW COURSE MEASUREMENTS

DRAINAGE BASIN AND OR SNOW COURSE NAME:		Elevation	THIS YEAR			PAST RECORD	
			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches) Last Year	Average +
<u>SNAKE RIVER</u>							
Bear Creek		7,800	1/28/80	47	14.0	9.9	13.6
Fox Creek		6,800	NS	-	-	-	-
Gull Creek		8,800	1/31/80	43	12.3	10.2	11.9
Hummingbird Springs		8,945	NS	-	-	14.0	15.5
Merritt Mountain AM		7,000	1/26/80	14	3.4	5.5a	4.2*
Pole Creek Ranger Station		8,330	1/31/80	46	14.0	11.7	13.3
Seventy Six Creek		7,100	1/28/80	31	8.8	6.2	7.8
Stag Mountain AM		7,700	1/26/80	13	3.4a	5.0	3.7*
<u>WHITE RIVER</u>							
Big Bend		6,700	1/28/80	25	6.0	7.4	6.1
Columbia Basin AM		6,650	1/26/80	20	5.4a	8.8a	6.9
Eawn Creek AM		7,000	1/26/80	14	3.5a	6.0a	3.5
Gold Creek		6,600	1/28/80	16	4.0	5.6	3.9
Jack Creek, Lower		6,800	NS	-	-	-	-
Jack Creek, Upper		7,250	1/28/80	23	6.1	8.5	4.2
Jacks Peak		8,420	1/28/80	49	14.7	13.7	-
Laurel Creek		6,700	1/28/80	28	6.8	5.4	5.7*
Louse Canyon AM (OR)		6,440			-	-	2.3*
Taylor Canyon		6,200	1/31/80	10	2.3	3.8	4.0
<u>UPPER HUMBOLDT RIVER</u>							
American Beauty AM		7,800	1/26/80	12	2.6a	6.5a	6.5*
Corral Canyon		8,500	1/30/80	43	9.2	10.6	6.9*
Dorsey Basin		8,100	1/20/80	33	8.9	10.3	-
Cry Creek		6,500	1/30/80	11	1.5	-	-
Fry Canyon		6,700	1/31/80	19	5.9	5.6	5.2
Green Mountain		6,000	1/29/80	28	6.4	10.6	-
Harrison Pass #1		6,600	NS	-	-	-	-
Harrison Pass #2		7,400	NS	-	-	-	-
Lamoille #1		7,100	1/30/80	30	5.9	4.5	5.7
Lamoille #2		7,700	1/30/80	34	6.9	6.4	8.1
Lamoille #5		8,700	1/30/80	66	21.7	19.0	17.1
Pole Canyon #2		7,700	NS	-	-	-	-
Robinson Lake AM		9,200	1/26/80	68	20.4a	21.3a	19.9*
Rodeo Flat		6,800	1/31/80	16	4.3	6.3	4.1
Ryan Ranch		5,800	NS	-	-	-	-
Smith Creek		7,700	NS	-	-	9.4	-
Tent Mountain AM		7,000	1/26/80	11	2.6a	5.0a	-
Tent Mountain AM		8,350	1/26/80	33	7.9a	10.3a	-
Tremewain Ranch		5,700	1/31/80	2	0.8	1.4	1.2
Trout Creek, Lower		6,900	NS	-	-	-	-
Trout Creek, Upper AM		8,500	1/26/80	24	7.2a	7.5a	12.0*
<u>LOWER HUMBOLDT RIVER</u>							
Golconda #2		6,000	1/29/80	14	3.6	5.3	1.3*
Midas AM		7,200	1/26/80	1	0.1a	3.6a	2.1*
Toe Jam AM		7,700	1/26/80	24	6.5a	8.0a	6.7*
<u>CENTRAL GREAT BASIN</u>							
Montgomery Pass		7,100	1/29/80	0	0.0	0.3	1.1*
<u>LOWER COLORADO RIVER</u>							
Mathew Canyon		6,000	1/30/80	6	1.5	5.3	1.3*
Pine Canyon		6,200	NS	-	-	3.2	-
<u>EASTERN NEVADA</u>							
Baker #1		7,950	1/30/80	20	4.1	4.5	-
Baker #2		8,950	1/30/80	39	9.6	9.8	-
Baker #3 AM		9,250	1/30/80	37	9.3a	10.0a	9.2
Berry Creek		9,100				13.2	-
Bind Creek		7,500				3.8	-
Defiance Mines AM		9,400	1/30/80	43	10.0a	-	12.1*
Hole-in-Mountain		7,900	NS	-	-	-	-
Kalamazoo Creek		7,400	1/27/80	14	3.7	6.2	-
Murray Summit		7,250	NS	-	-	-	-
Robinson Summit		7,600	NS	-	-	-	-
Silver Creek #2 AM		9,000	1/30/80	33	8.0a	4.2a	4.8*
Ward Mountain #2 AM		7,400	1/30/80	19	4.8a	7.3a	5.1*
White River #1		7,400	NS	-	-	-	-

SNOW COURSE MEASUREMENTS

DRAINAGE BASIN and/or SNOW COURSE NAME	Elevation	THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (inches)	Water Content (inches)	Last Year	Average

DESERT RESEARCH INSTITUTE MEASUREMENTS

TAHOE-TRUCKEE BASIN

Alder Creek	6,960	1/25/80	47	16.0	11.6	-
Apollo Way	7,300	1/24/80	35	12.7	4.6	-
Bennett Flat	6,200	1/25/80	25	8.5	5.6	-
Davis Creek	5,160	1/24/80	-0-	-0-	1.2	-
Evergreen Hills Road	5,700	1/23/80	2	0.5	3.2	-
Glenwood Creek	7,440	1/23/80	50	15.0	10.4	-
Hennessey Pass Junction	6,410	1/25/80	24	8.0	4.7	-
Hobart Mills	5,850	1/25/80	12	3.9	3.5	-
Incline Lake	8,000	1/24/80	54	21.9	10.8	-
Jones Creek	6,000	1/23/80	2	0.5	2.5	-
Mount Rose Resort	8,280	1/24/80	73	27.5	14.1	-
North Star Fire Department	6,320	1/25/80	13	4.5	4.7	-
R&R Test Site	6,400	1/23/80	21	6.7	5.5	-
Sky Tavern	7,620	1/23/80	46	15.3	7.5	-
Spooner Summit	7,620	1/24/80	34	11.6	6.5	-
Squaw Valley Fire Department	6,240	1/25/80	21	8.4	5.5	-
Sundance Lodge	7,060	1/23/80	33	11.5	7.4	-
Tahoe Meadows	8,540	1/24/80	92	36.3	16.5	-
Tamarack Lake	8,820	1/24/80	75	30.3	15.7	-
Third and Incline Creeks	6,235	1/24/80	5	2.2	3.0	-
Thunder Cliff	6,200	1/25/80	20	6.5	5.0	-
Truckee Airport	5,900	1/25/80	9	2.9	3.1	-
Whites Creek	5,670	1/23/80	1	0.4	1.3	-

NS Not scheduled this month

* Less than 15 year record

** Data delayed

a Aerial Marker

NOTE:

All averages based on 1964-77, 15 year period. This period is April 1 through July 31 and otherwise not as Aerial marker; water content estimated. * 1964-77 adjusted average.

PRECIPITATION (Inches)

CHARGE BASIN AND PRECIPITATION GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX. OCT 1 TO DATE		
		Date of Reading	Month's Precipitation	Last Year	This Year	Last Year	1978
<u>TAHOE-TRUCKEE</u>							
Echo Peak (CA)	7,800	12/31/79 to 1/31/80	25.7	10.3	48.6	18.2	-
Fallen Leaf (CA)	6,240	12/31/79 to 1/31/80	16.1	6.3	28.6	12.0	21.0
Hagan's Meadow (CA)	8,000	12/31/79 to 1/31/80	12.5	6.8	25.0	13.8	21.0
Heavenly Valley (CA)	8,800	12/31/79 to 1/31/80	11.7	3.8	22.3	11.9	20.3
Independence Camp (CA)	7,000	12/31/79 to 1/31/80	14.0	8.8	25.9	14.3	23.0
Independence Creek (CA)	6,500	12/27/79 to 1/31/80	10.8	6.3	18.9	9.7	22.8
Independence Lake (CA)	8,450	12/31/79 to 1/31/80	17.1	4.3	32.2	9.3	22.0
Marlette Lake	8,000	12/31/79 to 1/31/80	13.7	3.8	23.2	12.5	22.9
Mount Rose	9,000	12/31/79 to 1/31/80	13.5	6.8	23.8	13.8	-
Mount Rose Ski Area	9,000	12/27/79 to 1/31/80	16.3	9.2	32.5	-	-
Tahoe City Cross (CA)	6,750	12/29/79 to 1/30/80	16.8	7.2	28.8	13.3	19.0
Truckee #2 (CA)	6,400	10/1/79 to 1/30/80	-	6.1	21.9	9.8	8.6
Ward Creek #3 (CA)	6,750	12/31/79 to 1/31/80	25.8	12.0	49.7	22.8	38.0
<u>CARSON</u>							
Blue Lakes (CA)	8,000	1/2/80 to 1/30/80	15.1	-	31.5	-	-
Ebbetts Pass #2 (CA)	8,700	12/31/79 to 1/31/80	19.8	9.3	37.9	20.6	25.0
Poison Flat (CA)	7,900	12/27/79 to 1/30/80	14.1	7.3	22.1	16.4	17.4
Wet Meadows #2 (CA)	8,100	10/1/79 to 1/30/80	-	10.6	33.3	12.8	17.6
<u>WALKER</u>							
Leavitt Meadows (CA)	7,200	12/27/79 to 1/30/80	15.0	10.0	24.5	15.6	-
Lobdell Lake (CA)	9,200	12/31/79 to 1/31/80	8.2	4.2	15.4	8.8	17.6
Sonora Pass Bridge (CA)	8,800	12/31/79 to 1/31/80	14.0	7.5	25.6	14.4	20.6
Virginia Lakes Ridge (CA)	9,200	12/31/79 to 1/31/80	10.6	5.1	18.7	11.8	19.5
<u>HUMBOLDT</u>							
Corral Canyon	8,500	12/31/79 to 1/31/80	5.6	4.1	12.2	10.6	-
Dorsey Basin	8,100	12/31/79 to 1/31/80	5.2	4.7	11.8	10.6	11.4
Green Mountain	8,000	12/31/79 to 1/31/80	4.2	-	9.5	12.5	-
Lasville #3	7,700	10/1/79 to 1/30/80	-	-	12.2	9.4	11.1
Rodeo Flat	6,800	12/27/79 to 1/31/80	3.5	3.0	9.5	6.7	12.0

PRECIPITATION (Inches)

DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX. OCT 1 TO DATE		
		Date of Reading	Month's Precipitation	Last Year	This Year	Last Year	1978
<u>OWYHEE</u>							
Big Bend	6,700	12/31/79 to 1/31/80	4.2	3.5	9.6	6.6	8.1
Jack Creek, Upper	7,250	12/31/79 to 1/31/80	4.8	5.9	12.4	10.2	9.2
Jacks Peak	8,420	10/1/79 to 1/28/80	-	-	19.1	12.5	13.0
Laurel Draw	6,700	12/31/79 to 1/31/79	4.9	-	13.9	9.6	-
Taylor Canyon	6,200	12/27/79 to 1/31/80	3.8	2.3	6.1	4.5	5.3
<u>SNAKE</u>							
Bear Creek	7,800	12/1/79 to 1/31/80	8.0	7.5	15.7	11.5	--
76 Creek	7,100	12/31/79 to 1/31/80	4.9	3.1	11.7	7.8	-
<u>NORTHERN GREAT BASIN</u>							
Cedar Pass (CA)	7,100	12/31/79 to 1/31/80	8.1	-	21.0	6.9	14.3

Agencies Cooperating in Collecting Data Contained in this Bulletin

FEDERAL

Agricultural Research Service
Bureau of Reclamation
Fish and Wildlife Service
Forest Service
Geological Survey
Soil Conservation Service
U. S. District Court - Federal Water Master
NOAA, National Weather Service

STATE

California Cooperative Snow Surveys
California Department of Parks and Recreation
California Department of Water Resources
Colorado River Commission of Nevada
Idaho Cooperative Snow Surveys
Nevada Association of Conservation Districts
Nevada Department of Conservation & Natural Resources
Division of Water Resources
Nevada State Forester
Oregon Cooperative Snow Surveys
University of Nevada, Desert Research Institute
Utah Cooperative Snow Surveys
White Mountain Research Station, Univ. of California

PRIVATE

Amalgamated Sugar Company
Kennecott Copper Corporation
Nevada Irrigation District
Owyhee Project North Board of Control
Owyhee Project South Board of Control
Pacific Gas and Electric Company
Pershing County Water Conservation District
Sierra Pacific Power Company
Truckee-Carson Irrigation District
Walker River Irrigation District
Washoe County Water Conservancy District

Other organizations and individuals furnish valuable information for the snow survey reports. Their Cooperation is gratefully acknowledged.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

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mining and industry

*"The Conservation of Water begins
with the Snow Survey"*